# Center for Advanced Combustion Engineering Research

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Background

Established in 1986 as a joint project between BYU and the University of Utah for the purpose of advancing combustion engineering research, education, and technology. The principle focus is on clean and efficient use of fossil fuels including coal, oil, and natural gas as well as the combustion of toxic and municipal solid wastes. Received "Distinguished Center" status in 1991.

FY94-95 Overview

**Current**

| | |
|---|---|
| 1994-95 Award | $100,000 |
| Matching Funds | $11,677,882 |
| Patents Pending | 0 |
| Patents Issued | 2 |
| License Agreements | **0** |
| Spin-off Companies | 1 |
| Companies Assisted | 156 |
| Industry Jobs Created | 12 |
| Center Jobs Created | 153 |

Cumulative Accomplishments

**Cumulative**

| | |
|---|---|
| Awards | $900,000 |
| Matching Funds | $63,052,699 |
| Patents Issued | 2 |
| License Agreements | 55 |
| Spin-off Companies | 4 |

Technologies

The international competitiveness of the nation's basic and high-technology industries relies in part on the ability to move efficient-use fuel resources such as coal, heavy oil, oil shale, and tar sands, which are abundantly available in Utah and the western United States. Specific Center technologies include:

- Mechanisms of fossil-fuel combustion and pollutant and soot formation.
- The relationship between fuel properties and conversion.
- Computer models to control and record the performance of particular combustion chambers.
- Pollution formation/control and waste incineration.

Center Highlights

- The Center has attracted more than **$61 million in grants and other funds** over ten years.
- The Center has provided **new technology for Utah companies** such as **REI, Inc and Geneva Steel Company.**
- New technology and software products from the Center have led to the creation of **four new businesses in Utah.**
- The Center is one of only 18 highly sought-after national engineering centers.